

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057674 A2

(51) International Patent Classification⁷: **H01L 27/00**
(21) International Application Number:
PCT/GB2003/005571

(74) Agent: SHADE, Matthew; IP Department, Cambridge
Display Technology Limite, d, Greenwich House, Madin-
gley Rise, Madingley Road, Cambridge, Cambridgeshire
CB3 0TX (GB).

(22) International Filing Date:
18 December 2003 (18.12.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0229653.1 20 December 2002 (20.12.2002) GB

(71) Applicant (*for all designated States except US*): CAM-
BRIDGE DISPLAY TECHNOLOGY LIMITED
[GB/GB]; IP Department, Greenwich House, Madingley
Rise, Madingley Road, Cambridge, Cambridgeshire CB3
0TX (GB).

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): HALLS, Jonathan
[GB/GB]; Cambridge Display Technology Limited,
Greenwich House, Madingley Rise, Madingley Road,
Cambridge, Cambridgeshire CB3 0TX (GB). WILSON,
Richard [GB/GB]; Cambridge Display Technology Lim-
ited, Greenwich House, Madingley Rise, Madingley Road,
Cambridge, Cambridgeshire CB3 0TX (GB).

Published:

— *without international search report and to be republished
upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: ELECTRICAL CONNECTION OF OPTOELECTRONIC DEVICES

(57) **Abstract:** The invention describes a method of preparing a plurality of electrically connected organic optoelectronic devices on a substrate comprising firstly, preparing a plurality of organic optoelectronic devices on a substrate, by the steps of providing a patterned layer of a first conductive material over the substrate, providing layer of organic optoelectronic material over the layer of first conductive material and providing a patterned layer of a second conductive material over the layer of organic optoelectronic material, at least partially removing regions of the organic optoelectronic material which are not covered by the patterned layer of second conductive material and secondly providing electrical connections to electrically connect at least two of the plurality of organic optoelectronic devices. The organic optoelectronic devices are suitably organic photovoltaic devices or organic electroluminescent devices.

WO 2004/057674 A2